

IN THE CLAIMS

Please amend the status of the claims to that as indicated below:

Claims 1-10 (canceled)

11. (currently amended) A radioactive dose dispensing apparatus for automatically filling a container with a required radioactive dose in a sterile environment, comprising:

a container for containing a radioactive dose;

means for radiation shielding of said radioactive dose dispensing apparatus;

means for controlling a mix of radioactive stock solution and dilution stock solution for automatically diluting the radioactive stock solution with the dilution stock solution as both the radioactive stock solution and the dilution stock solution simultaneously pass into said container; and,

means for detecting radioactivity of said mix of radioactive stock solution and dilution stock solution.

12. (currently amended) The radioactive dose dispensing apparatus according to Claim 11, wherein said container is a plunger-operated ~~disposable~~ syringe.

13. (currently amended) The radioactive dose dispensing apparatus according to Claim 12, further comprising a shielded receptacle for receiving said plunger-operated ~~disposable~~ syringe.

14. (currently amended) The radioactive dose dispensing apparatus according to Claim 12, further comprising drive means for actuating said plunger-operated ~~disposable~~ syringe.

15. (currently amended) The radioactive dose dispensing apparatus according to Claim 14, wherein said drive means is a linear drive mechanism for actuating said plunger-operated ~~disposable~~ syringe.

16. (currently amended) The radioactive dose dispensing apparatus according to Claim 12, further comprising a programmable logic controller for automating said radioactive dose dispensing apparatus and calculating a required dose, said programmable logic controller operable in combination with a radiation detector for controlling the radioactive dose being dispensed into said plunger-operated ~~disposable~~ syringe.

17. (previously presented) The radioactive dose dispensing apparatus according to Claim 16, wherein programmable logic controller is operable via a computer interface.

18. (previously presented) The radioactive dose dispensing apparatus according Claim 11, further comprising a disposable tubing assembly for providing a sterile fluid pathway for the dilution stock solution.

19. (currently amended) The radioactive dose dispensing apparatus according Claim 11, further comprising pinch ~~valves~~ valves for switching between the radioactive stock solution and the dilution stock solution.

Claim 20 (canceled)

21. (new) The radioactive dose dispensing apparatus according to Claim 12, wherein said plunger-operated syringe is disposable.

22. (new) A radioactive dose dispensing apparatus for automatically filling a container with a required radioactive dose in a sterile environment, comprising:

a container formed as a plunger-operated syringe;

means for radiation shielding of said radioactive dose dispensing apparatus;

means for controlling a mix of radioactive stock solution and dilution stock solution;

means for detecting radioactivity of said mix of radioactive stock solution and dilution stock solution; and,

a programmable logic controller for automating said radioactive dose dispensing apparatus and calculating a required dose, said programmable logic controller operable in combination with a radiation detector for controlling the radioactive dose being dispensed into said plunger-operated syringe.

23. (new) The radioactive dose dispensing apparatus according to Claim 22, wherein said plunger-operated syringe is disposable.

24. (new) The radioactive dose dispensing apparatus according to Claim 22, further comprising a shielded receptacle for receiving said plunger-operated syringe.

25. (new) The radioactive dose dispensing apparatus according to Claim 22, further comprising drive means for actuating said plunger-operated syringe.

26. (new) The radioactive dose dispensing apparatus according to Claim 25, wherein said drive means is a linear drive mechanism for actuating said plunger-operated syringe.

27. (new) The radioactive dose dispensing apparatus according to Claim 22, wherein programmable logic controller is operable via a computer interface.

28. (new) The radioactive dose dispensing apparatus according Claim 22, further comprising a disposable tubing assembly for providing a sterile fluid pathway for the dilution stock solution.

29. (new) The radioactive dose dispensing apparatus according Claim 22, further comprising pinch valves for switching between the radioactive stock solution and the dilution stock solution.